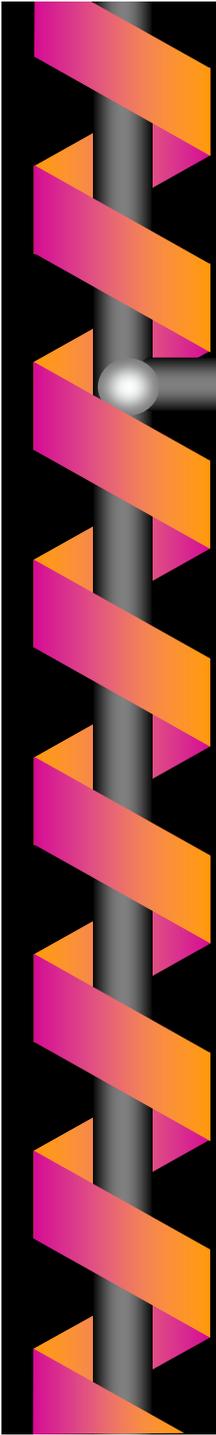




# Gas Welding and Cutting

**1926.350**

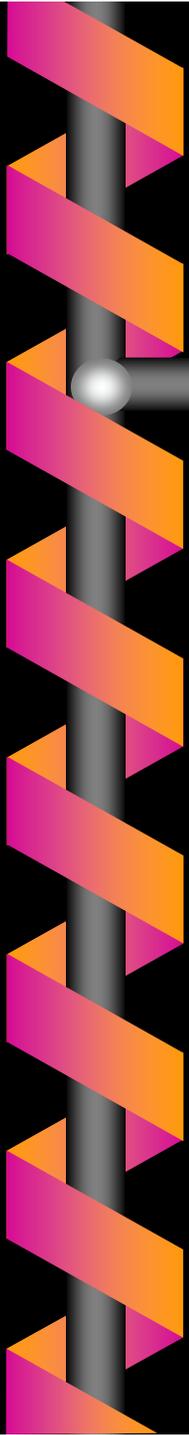


**1926.350**

## **Gas welding and cutting**

### **∞ Transporting, moving, and storing compressed gas cylinders**

- Valve protection caps shall be in place and secured
- When cylinders are hoisted, they shall be secured on a cradle, slingboard, or pallet. They shall not be hoisted or transported by means of magnets or choker slings



**1926.350**

## **Gas welding and cutting**

### **∞ Transporting, moving, and storing compressed gas cylinders**

- Cylinders shall be moved by tilting and rolling them on their bottom edges. They shall not be intentionally dropped, struck, or permitted to strike each other violently
- When cylinders are transported by powered vehicles, they shall be secured in a vertical position



**1926.350**

## **Gas welding and cutting**

### **∞ Transporting, moving, and storing compressed gas cylinders**

- Valve protection caps shall not be used for lifting cylinders from one vertical position to another
- Bars shall not be used under valves or valve protection caps to pry cylinders loose when frozen
- Warm, not boiling, water shall be used to thaw cylinders loose

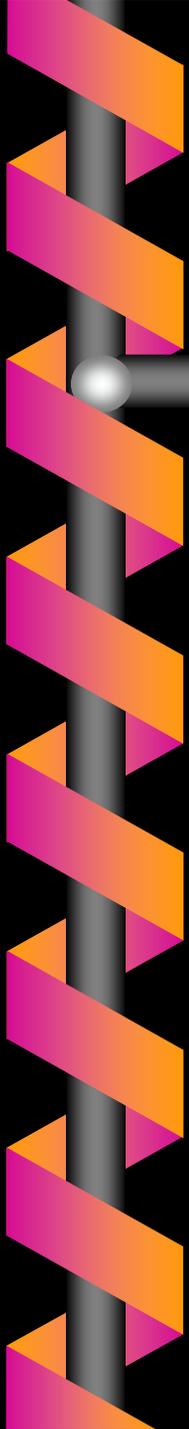


**1926.350**

## **Gas welding and cutting**

### **∞ Transporting, moving, and storing compressed gas cylinders**

- Unless cylinders are firmly secured on a special carrier intended for this purpose, regulators shall be removed and valve protection caps put in place before cylinders are moved



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## Gas welding and cutting

### ⌚ **Transporting, moving, and storing compressed gas cylinders**

- A suitable cylinder truck, chain, or other steadying device shall be used to keep cylinders from being knocked over while in use
- When work is finished, when cylinders are empty, or when cylinders are moved at any time, the cylinder valve shall be closed



**1926.350**

## **Gas welding and cutting**

### **⌚ Transporting, moving, and storing compressed gas cylinders**

- Compressed gas cylinders shall be secured in an upright position at all times except, if necessary, for short periods of time while cylinders are actually being hoisted or carried

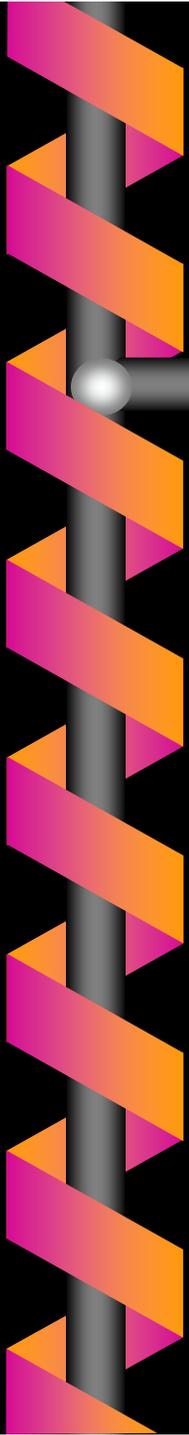


**1926.350**

## **Gas welding and cutting**

### **∞ Transporting, moving, and storing compressed gas cylinders**

- Oxygen cylinders in storage shall be separated from fuel-gas cylinders or combustible materials (especially oil or grease), a minimum distance of 20 feet (6.1 m) or by a noncombustible barrier at least 5 feet (1.5 m) high having a fire-resistance rating of at least one-half hour.

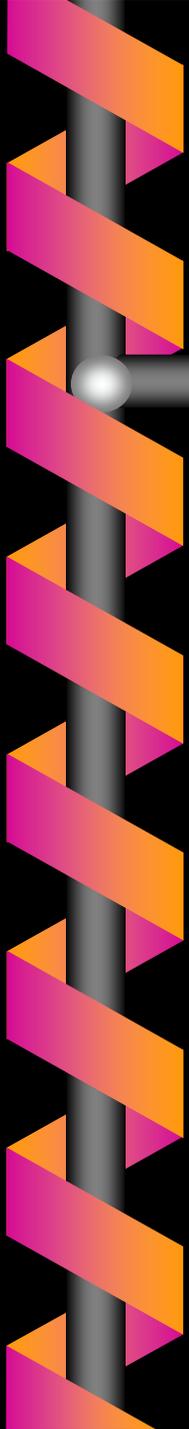


**1926.350**

## **Gas welding and cutting**

### **∞ Transporting, moving, and storing compressed gas cylinders**

- Inside of buildings, cylinders shall be stored in a well-protected, well-ventilated, dry location, at least 20 feet (6.1 m) from highly combustible materials such as oil or excelsior
- Cylinders should be stored in definitely assigned places away from elevators, stairs, or gangways

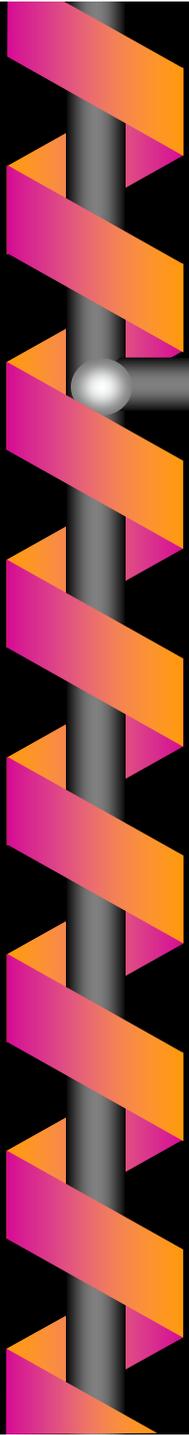


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## Gas welding and cutting

### ⌚ **Transporting, moving, and storing compressed gas cylinders**

- Assigned storage places shall be located where cylinders will not be knocked over or damaged by passing or falling objects, or subject to tampering by unauthorized persons
- Cylinders shall not be kept in unventilated enclosures such as lockers and cupboards



**1926.350**

## **Gas welding and cutting**

### **Ω Transporting, moving, and storing compressed gas cylinders**

- The in-plant handling, storage, and utilization of all compressed gases in cylinders, portable tanks, rail tankcars, or motor vehicle cargo tanks shall be in accordance with Compressed Gas Association Pamphlet P-1-1965

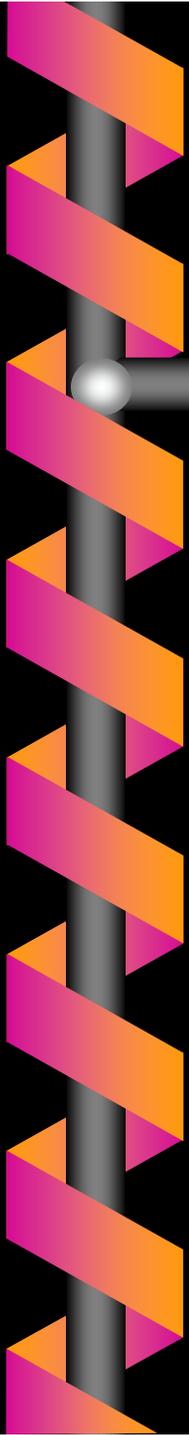


# 1926.350

## Gas welding and cutting

### ∞ Placing Cylinders

- Cylinders shall be kept far enough away from the actual welding or cutting operation so that sparks, hot slag, or flame will not reach them
- When this is impractical, fire resistant shields shall be provided.



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## Gas welding and cutting

### ∞ Placing Cylinders

- Cylinders shall be placed where they cannot become part of an electrical circuit. Electrodes shall not be struck against a cylinder to strike an arc

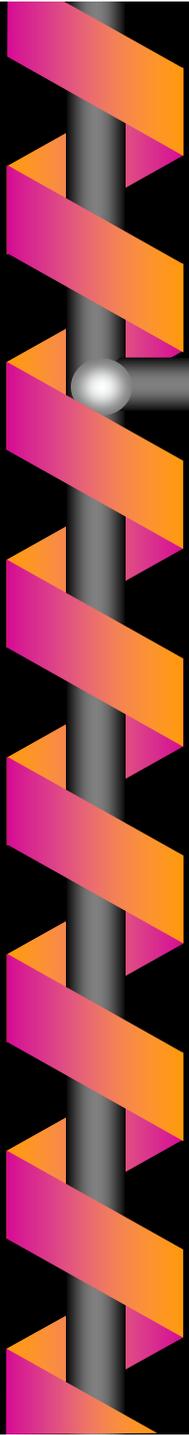


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# **Gas welding and cutting**

## **∞ Placing Cylinders**

- Fuel gas cylinders shall be placed with valve end up whenever they are in use
- They shall not be placed in a location where they would be subject to open flame, hot metal, or other sources of artificial heat

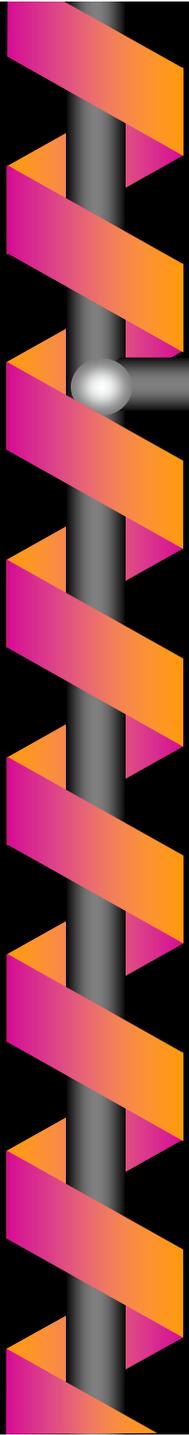


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# **Gas welding and cutting**

## **∞ Placing Cylinders**

- Cylinders containing oxygen or acetylene or other fuel gas shall not be taken into confined spaces

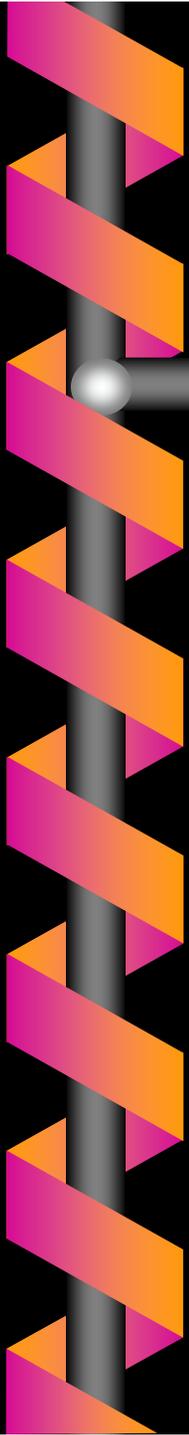


# 1926.350

## Gas welding and cutting

### ⌚ Treatment of cylinders

- Cylinders, whether full or empty, shall not be used as rollers or supports
- No person other than the gas supplier shall attempt to mix gases in a cylinder
- No damaged or defective cylinder shall be used

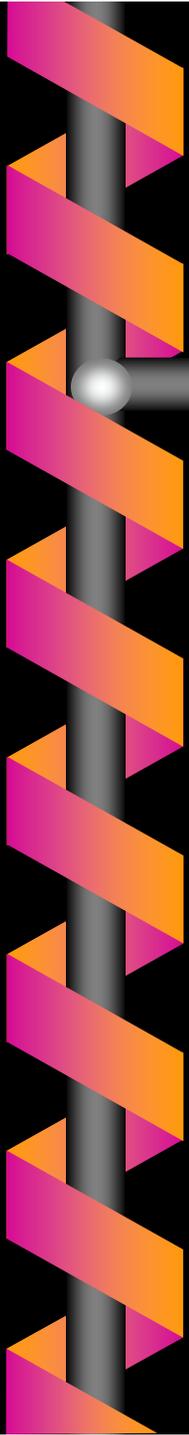


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## Gas welding and cutting

### Ω Use of fuel gas

- Before a regulator to a cylinder valve is connected, the valve shall be opened slightly and closed immediately
- This action is generally termed "cracking" and is intended to clear the valve of dust or dirt that might otherwise enter the regulator

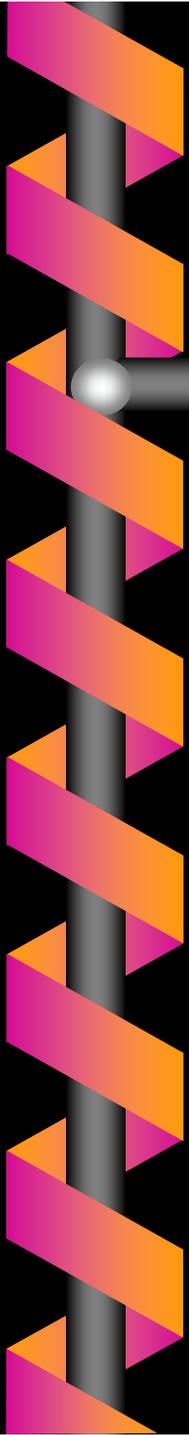


**1926.350**

# **Gas welding and cutting**

## **Ω Use of fuel gas**

- The cylinder valve shall always be opened slowly to prevent damage to the regulator
- For quick closing, valves on fuel gas cylinders shall not be opened more than 1 1/2 turns



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## Gas welding and cutting

### Ω Use of fuel gas

- When a special wrench is required, it shall be left in position on the stem of the valve while the cylinder is in use so that the fuel gas flow can be shut off quickly in case of an emergency
- In the case of manifolded or coupled cylinders, at least one such wrench shall always be available for immediate use

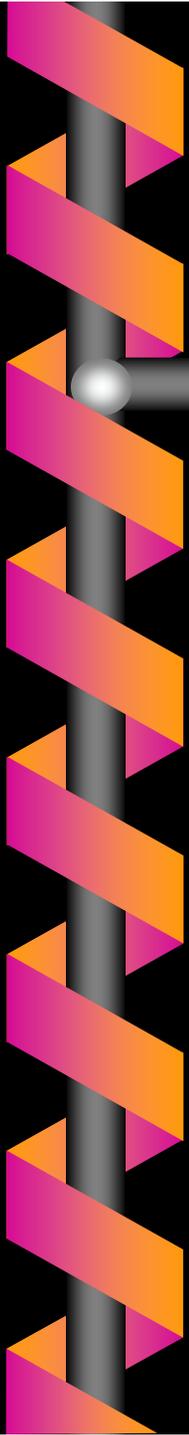


# 1926.350

## Gas welding and cutting

### Ω Use of fuel gas

- Before a regulator is removed from a cylinder valve, the cylinder valve shall always be closed and the gas released from the regulator
- If a leak should develop at a fuse plug or other safety device, the cylinder shall be removed from the work area

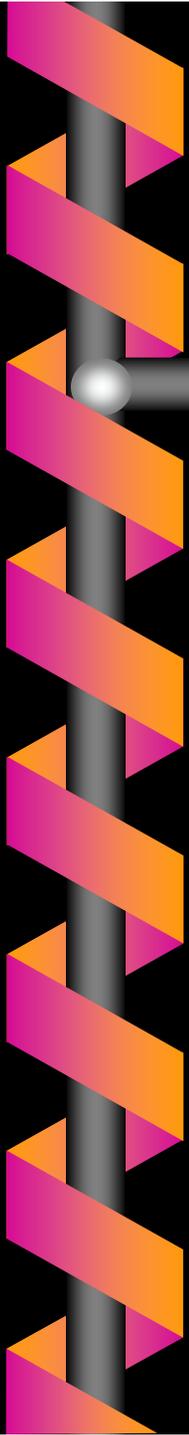


# 1926.350

## Gas welding and cutting

### Ω Hose

- Fuel gas hose and oxygen hose shall be easily distinguishable from each other
- The contrast may be made by different colors or by surface characteristics readily distinguishable by the sense of touch
- Oxygen and fuel gas hoses shall not be interchangeable

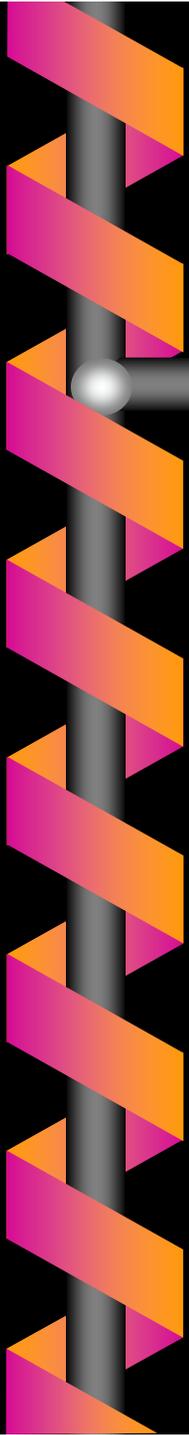


**1926.350**

# **Gas welding and cutting**

## **⌚ Hose**

- When parallel sections of oxygen and fuel gas hose are taped together, not more than 4 inches out of 12 inches shall be covered by tape

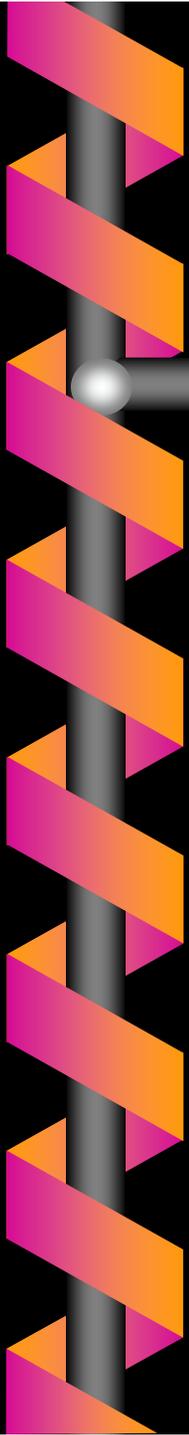


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## Gas welding and cutting

### ⌚ Hose

- All hose in use, carrying acetylene, oxygen, natural or manufactured fuel gas, or any gas or substance which may ignite or enter into combustion, or be in any way harmful to employees, shall be inspected at the beginning of each working shift
- Defective hose shall be removed from service

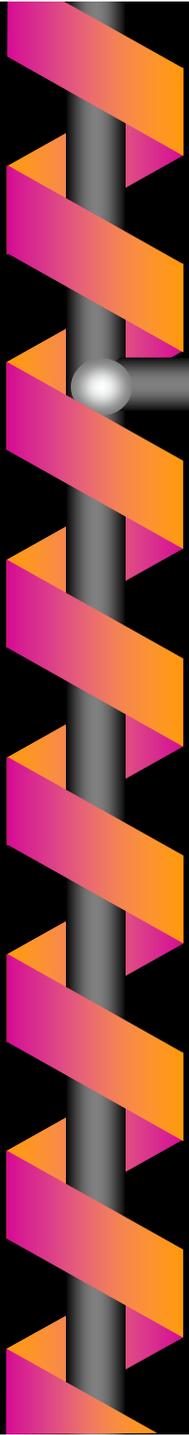


# 1926.350

## Gas welding and cutting

### ⌚ Hose

- Hose couplings shall be of the type that cannot be unlocked or disconnected by means of a straight pull without rotary motion
- Boxes used for the storage of gas hose shall be ventilated
- Hoses, cables, and other equipment shall be kept clear of passageways, ladders and stairs

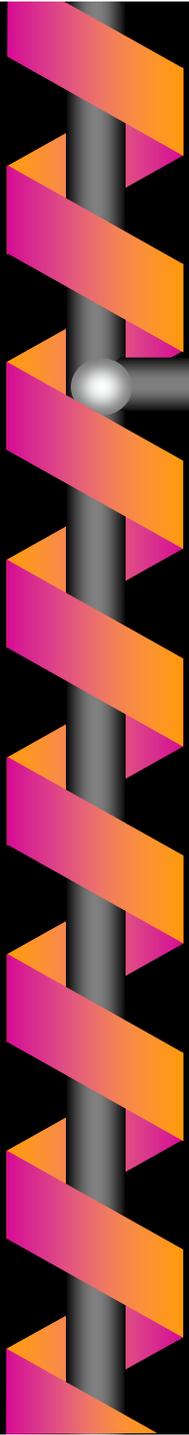


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## Gas welding and cutting

### ⌚ Torches

- Clogged torch tip openings shall be cleaned with suitable cleaning wires, drills, or other devices designed for such purpose
- Torches in use shall be inspected at the beginning of each working shift for leaking shutoff valves, hose couplings, and tip connections. Defective torches shall not be used

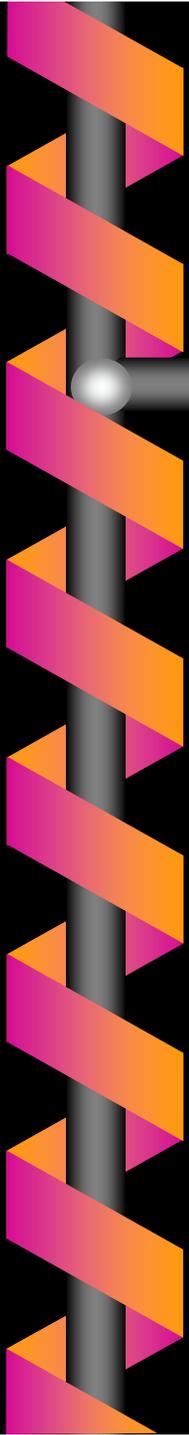


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# **Gas welding and cutting**

## **⌚ Torches**

- Torches shall be lighted by friction lighters or other approved devices, and not by matches or from hot work

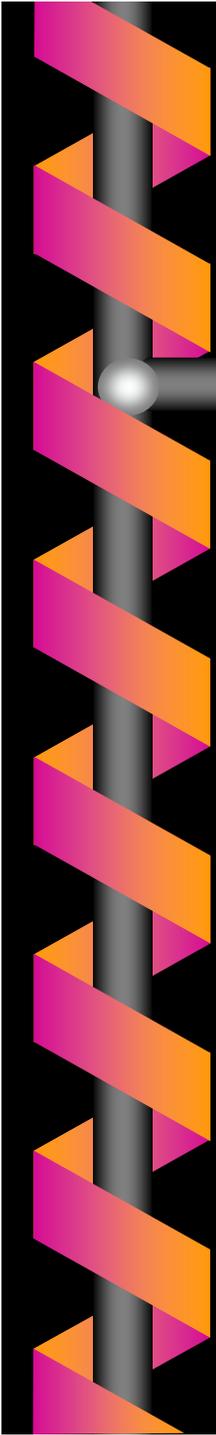


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# **Gas welding and cutting**

## **⌚ Regulators and gauges**

- Oxygen and fuel gas pressure regulators, including their related gauges, shall be in proper working order while in use



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## **Gas welding and cutting**

### **⌚ Oil and grease hazards**

- Oxygen cylinders and fittings shall be kept away from oil or grease
- Cylinders, cylinder caps and valves, couplings, regulators, hose, and apparatus shall be kept free from oil or greasy substances and shall not be handled with oily hands or gloves